

1/19

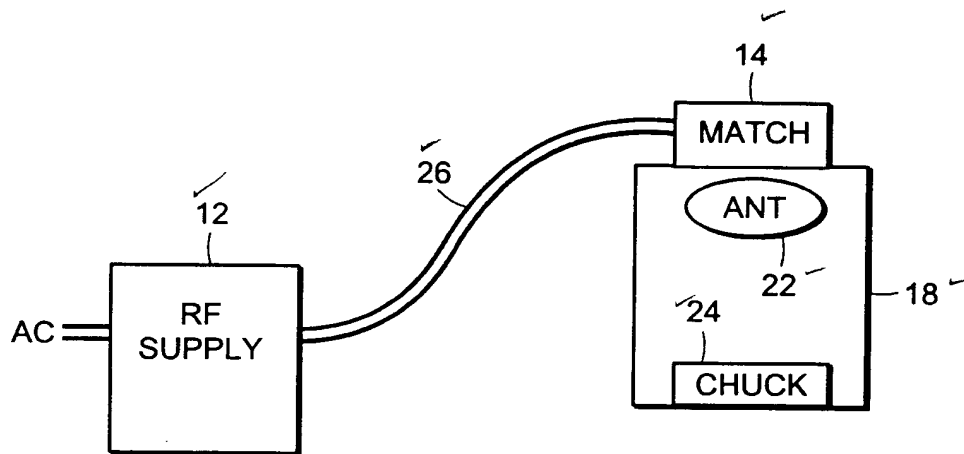


FIG. 1A
PRIOR ART

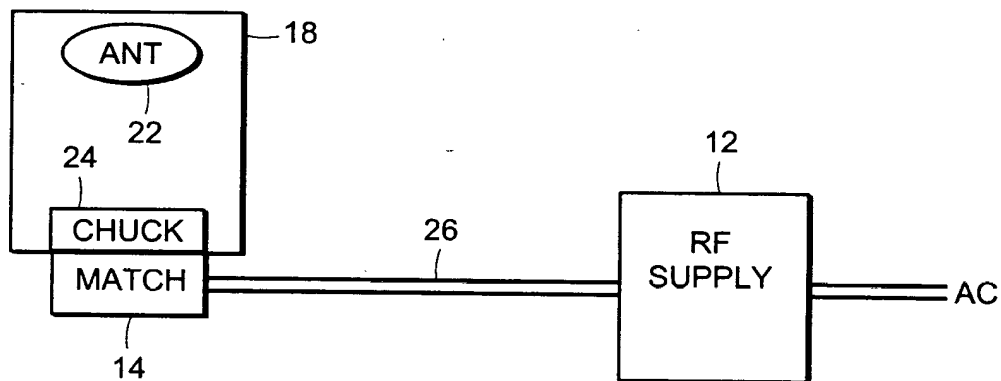


FIG. 1B
PRIOR ART

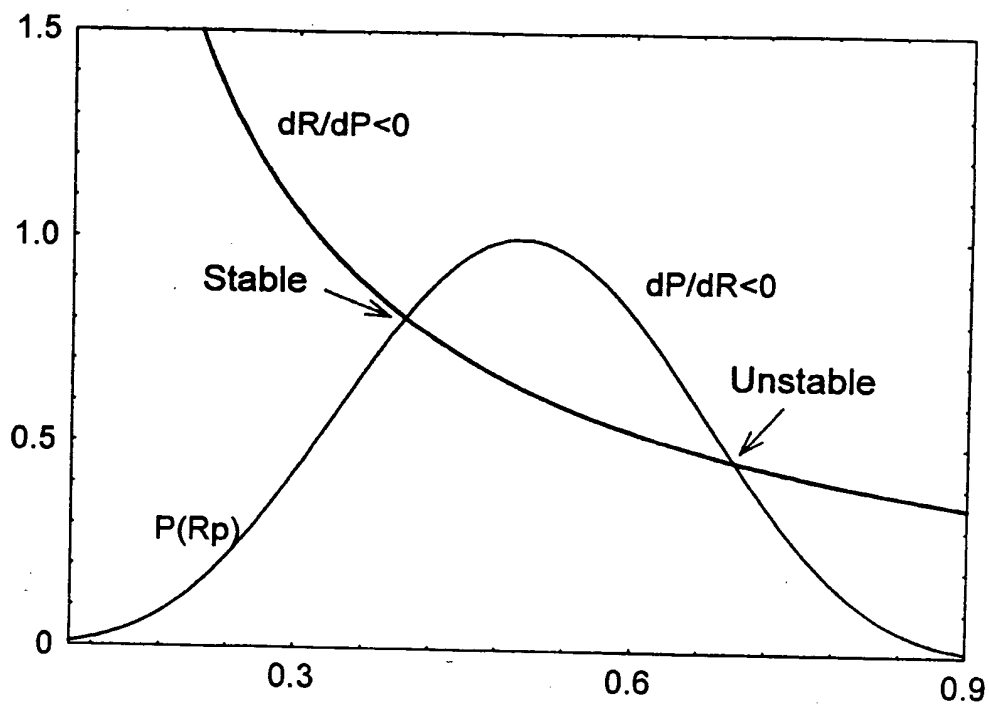


FIG. 2

3/19

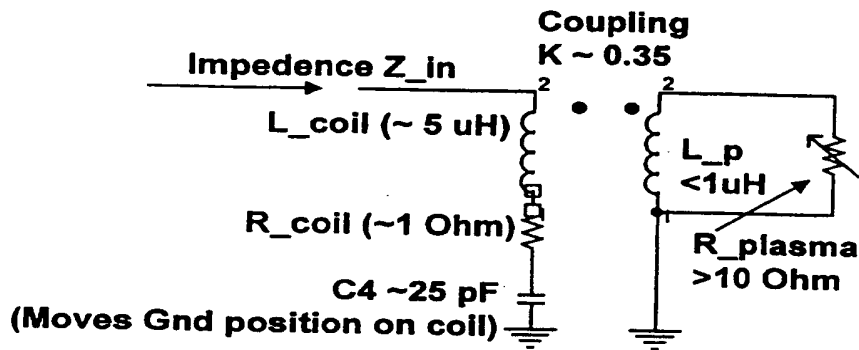


FIG. 3A

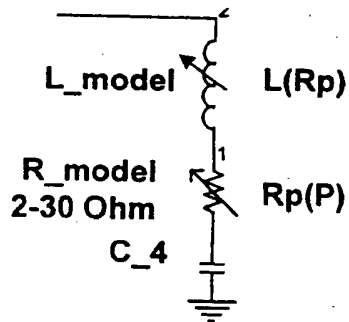


FIG. 3B

09/960,227-00000

4/19

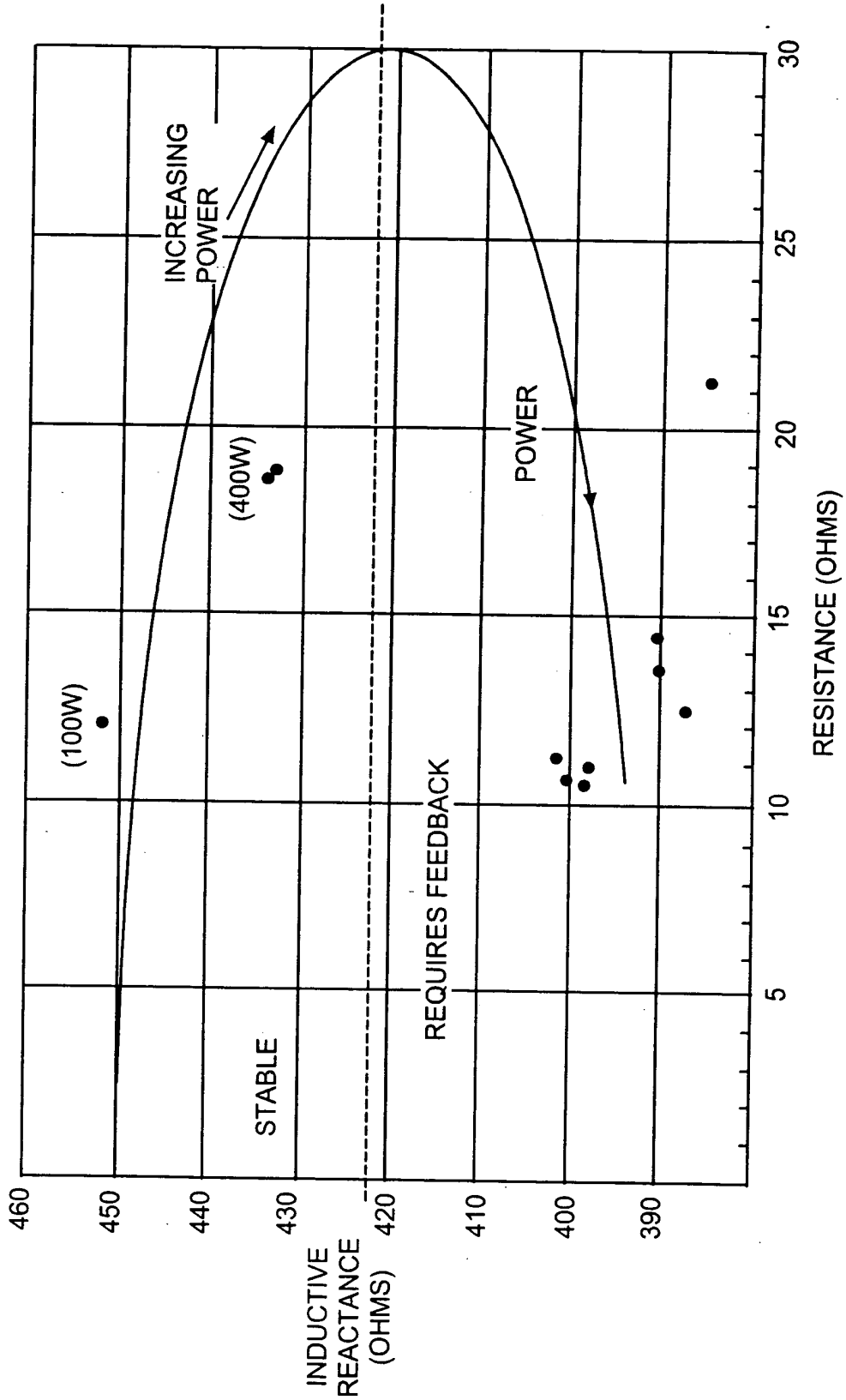


FIG. 4

5/19

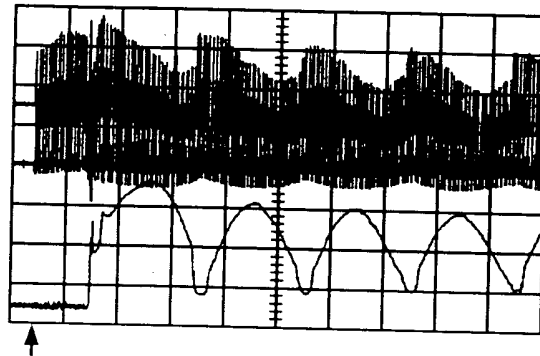


FIG. 5

6/19

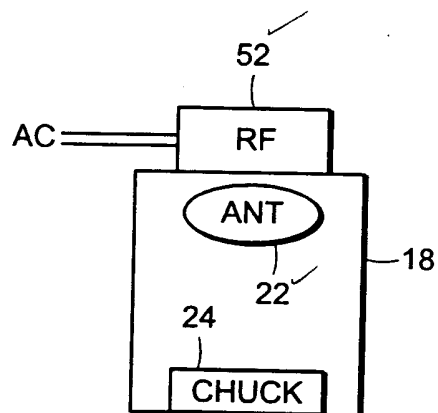


FIG. 6A

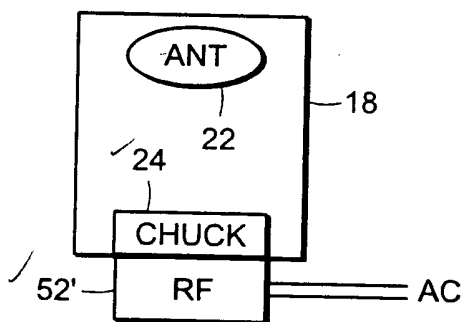


FIG. 6B

7/19

100

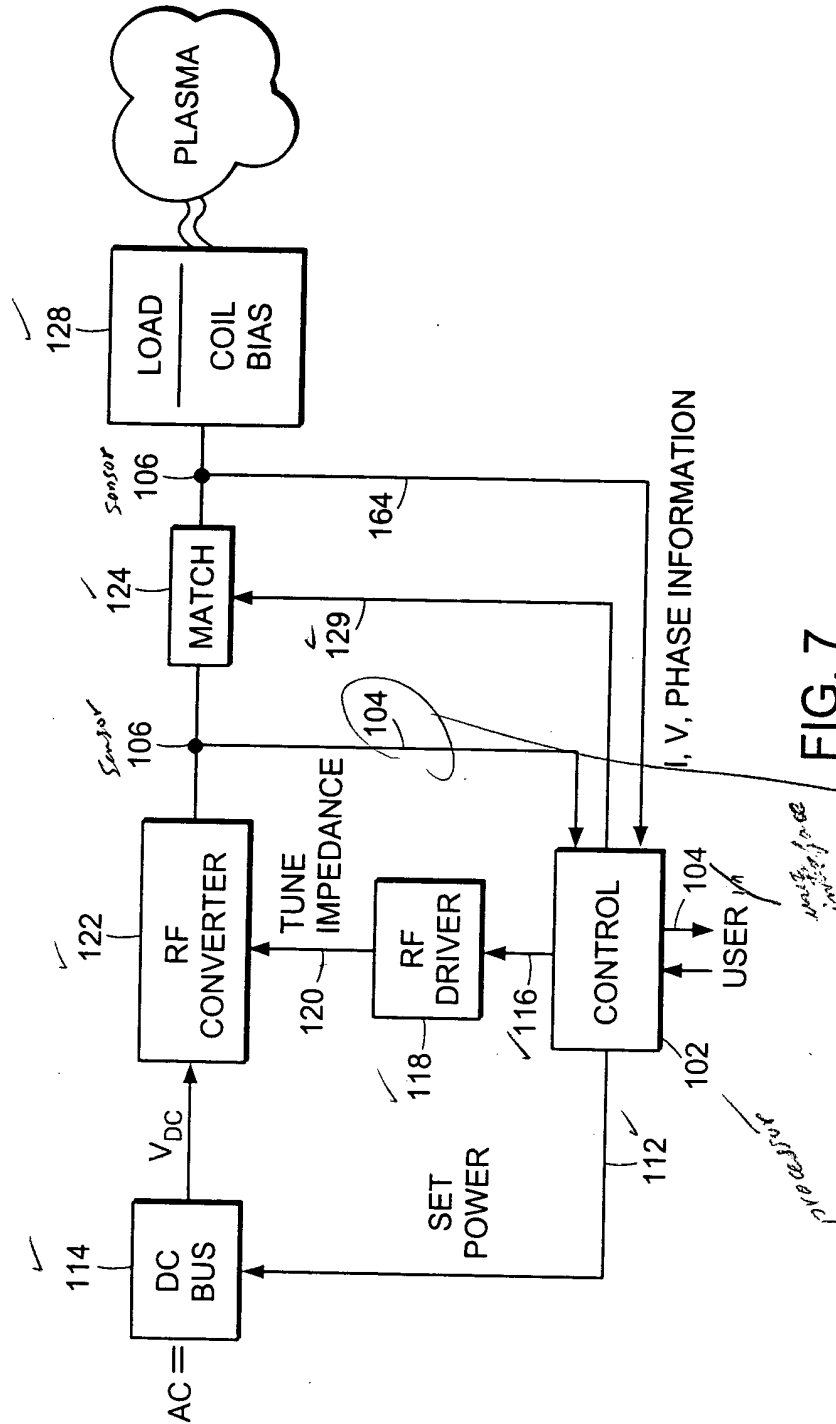


FIG. 7

8/19

150

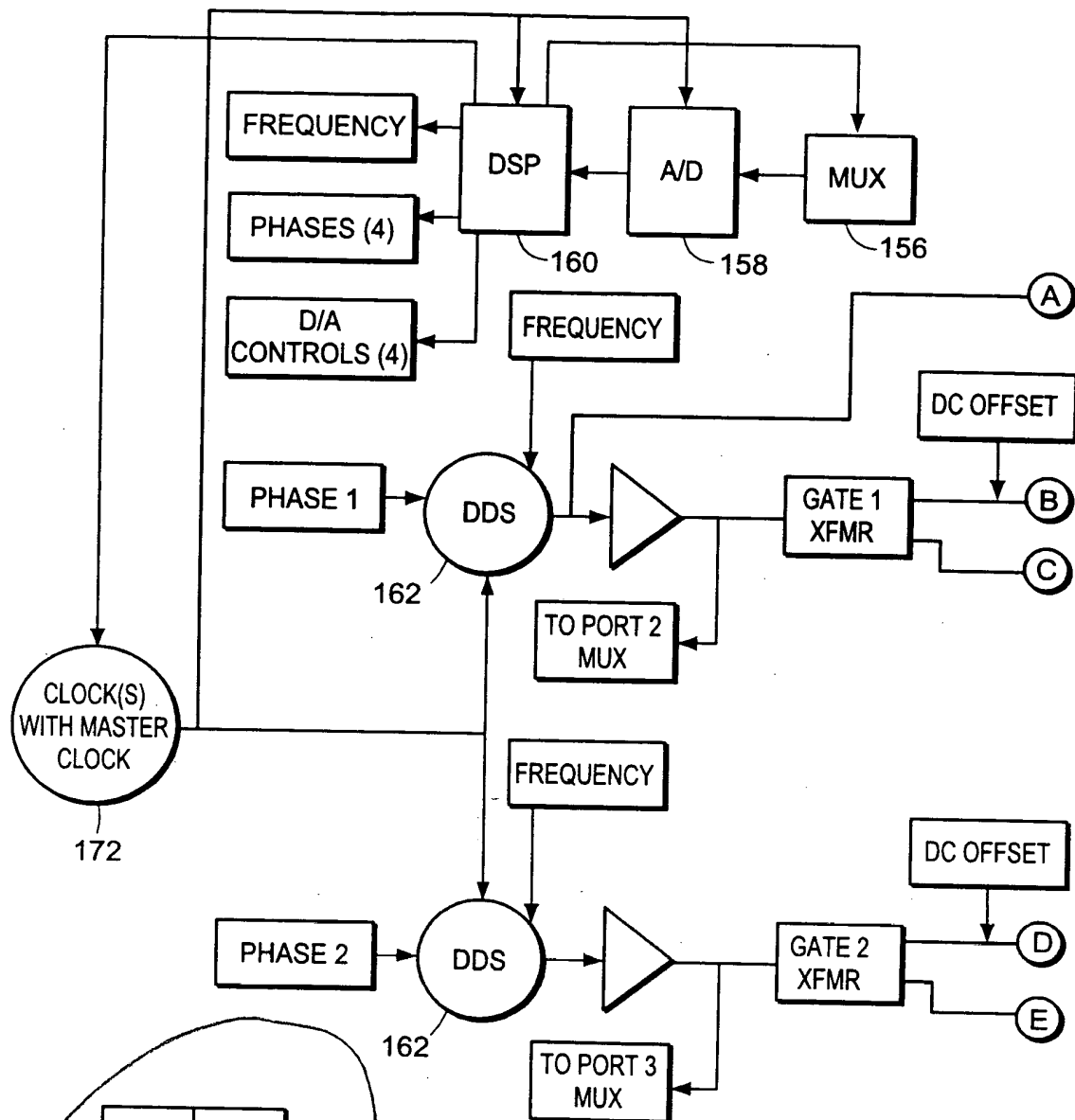


FIG. 8A
FIG. 8B

FIG. 8

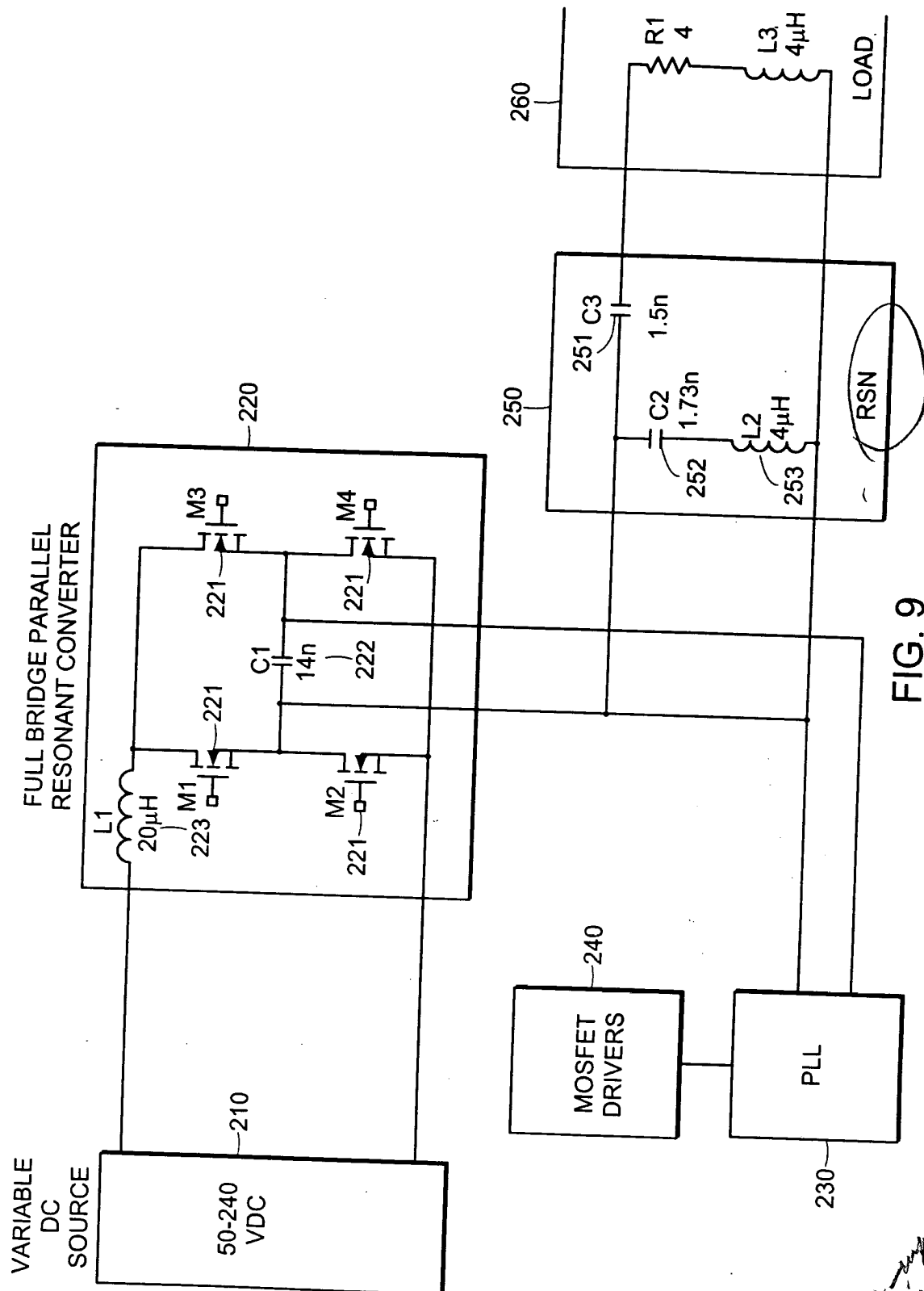
FIG. 8A

H-bridge control circuit

MUX = MULTIPLEXER
XFMR = TRANSFORMER

[illegible]

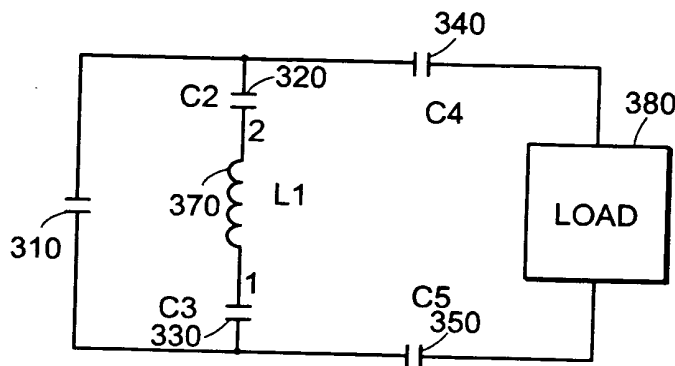
FIG. 9



230

plasma supply system
including
resonance inductively
coupled network

11/19



*resistance
substitution
network*

FIG. 10

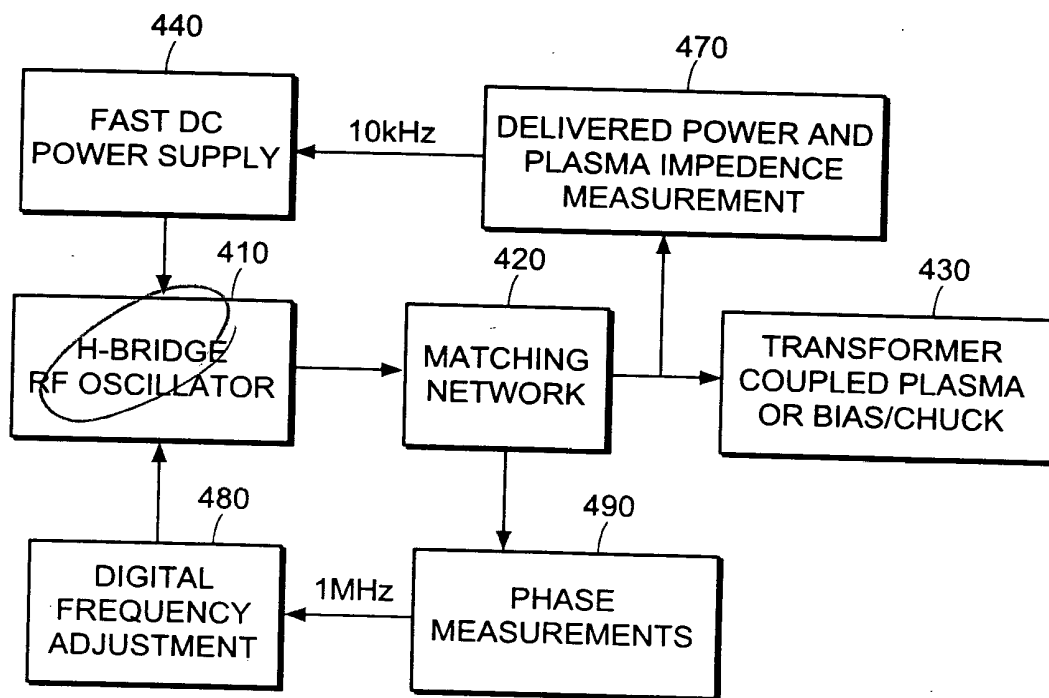


FIG. 11

*RF plasma generator
including
DC power supply
controlled with two loops*

12/19

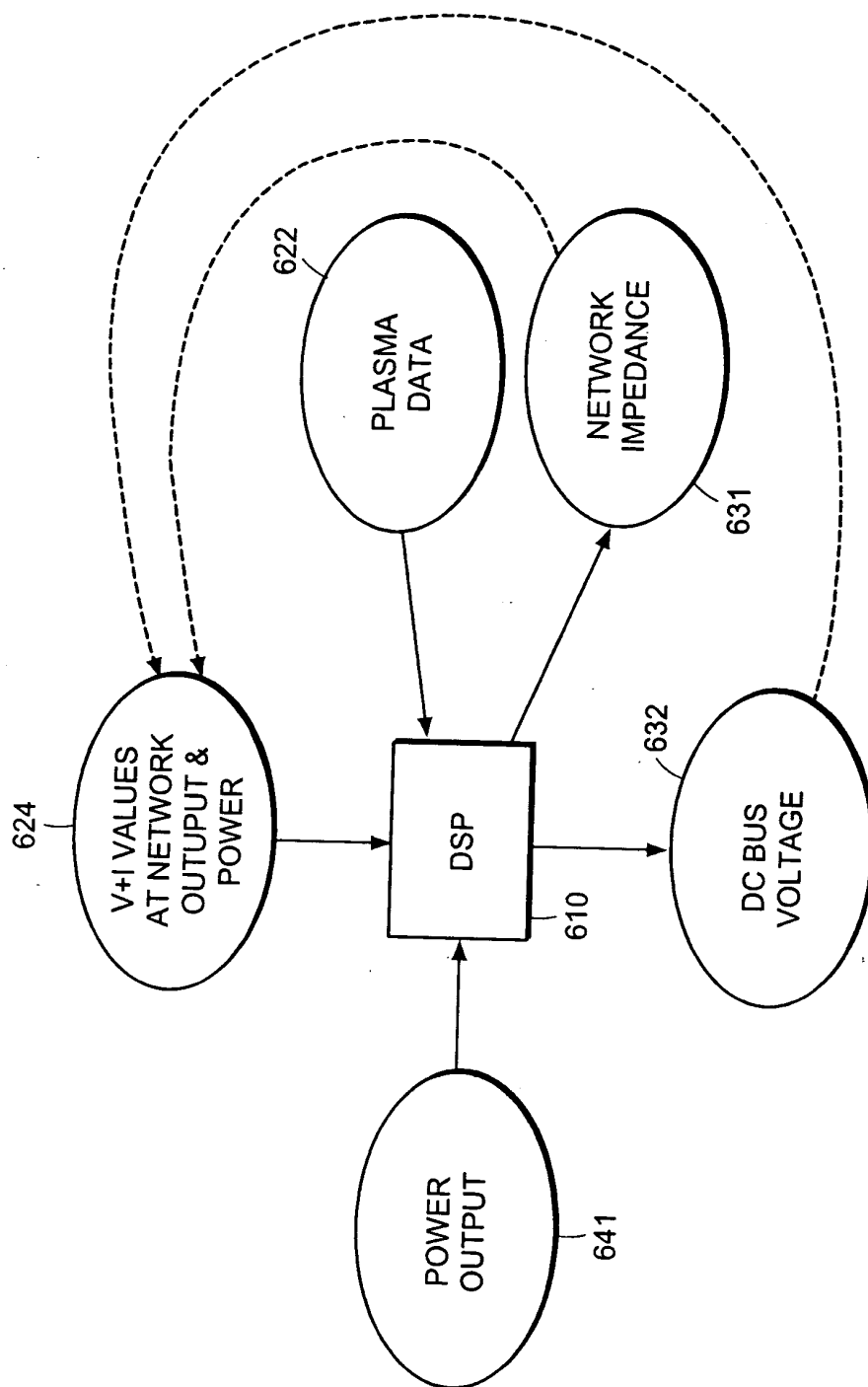


FIG. 12

13/19

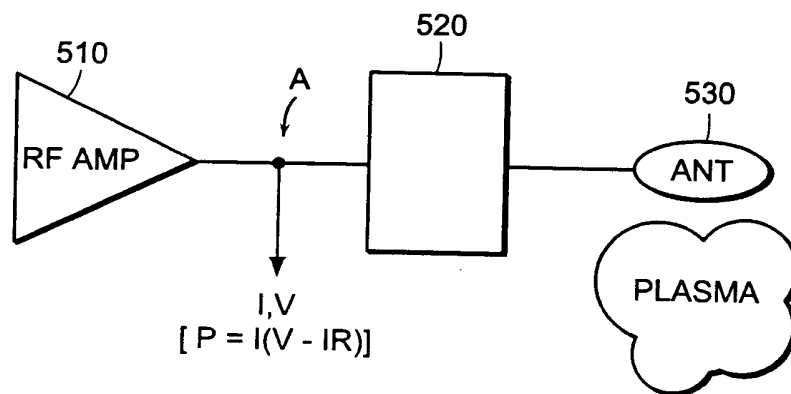


FIG. 13A

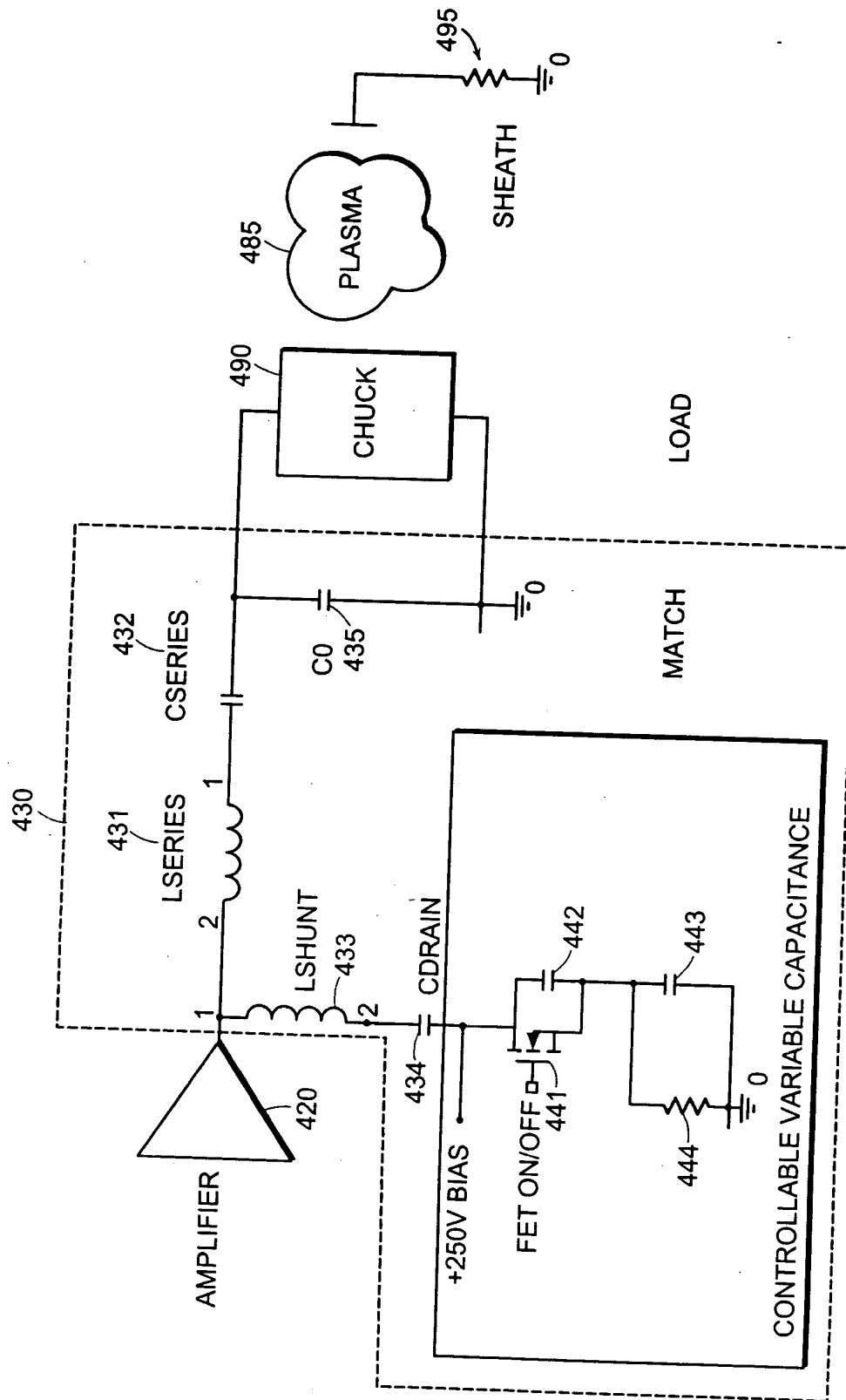
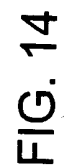
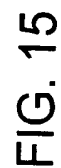


FIG. 13B

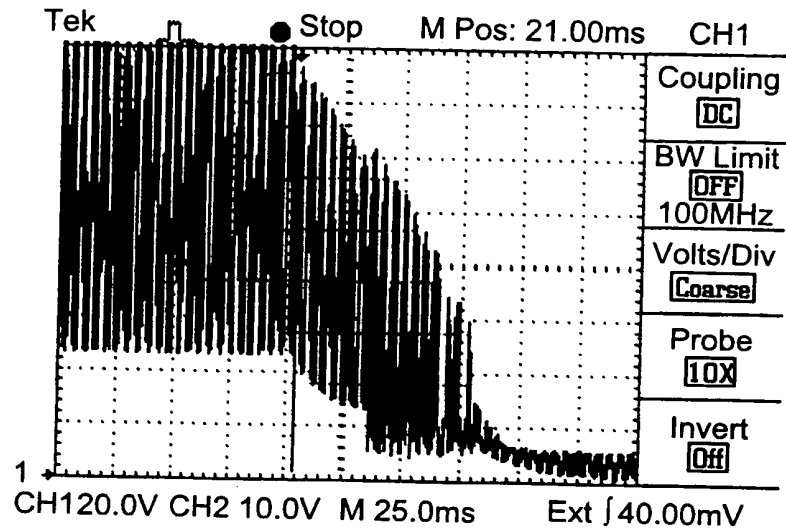


smooth switching
matching network



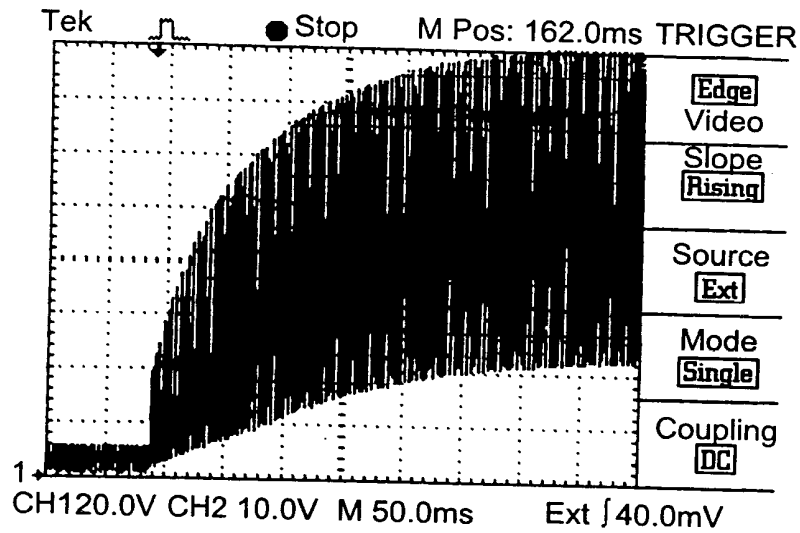
plasma processing system
including
smooth matching network

17/19



25 ms/div
FET Turn-on

FIG. 16A



50 ms/div
FET Turn-off

FIG. 16B

18/19

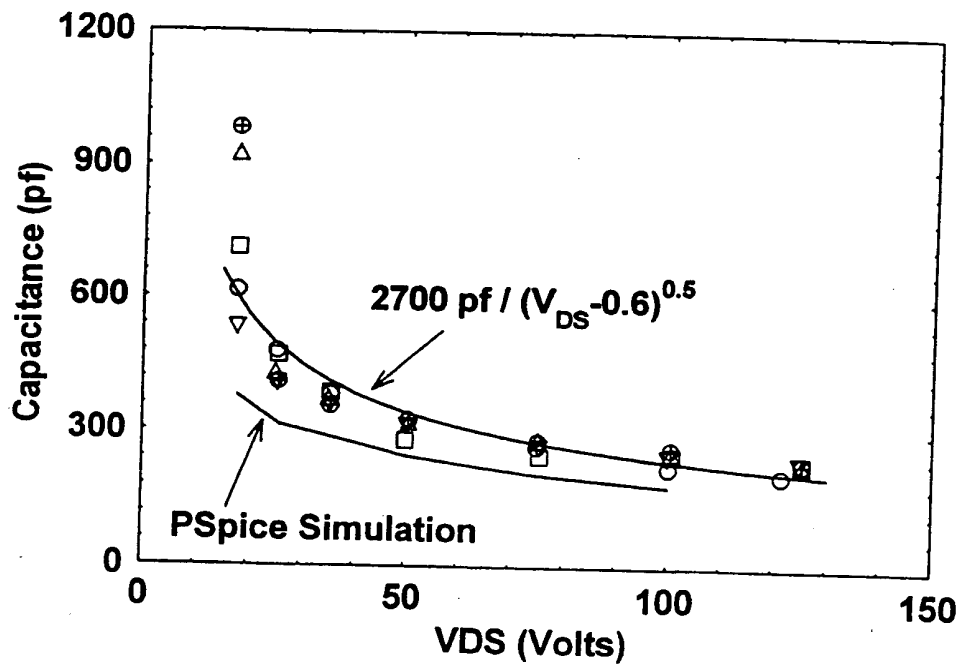


FIG. 17

19/19

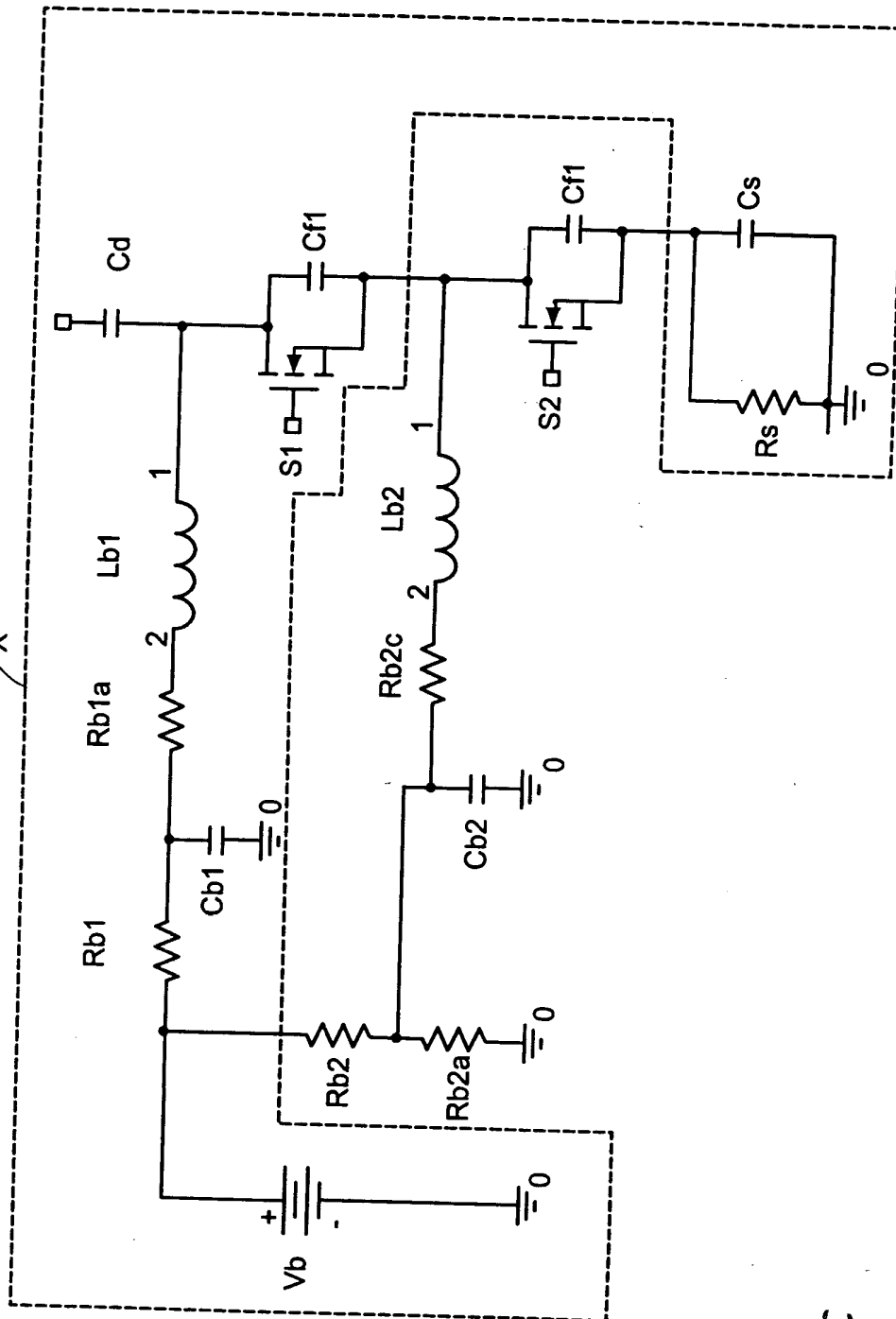


FIG. 18

including
multiple
smooth match portions

19/19

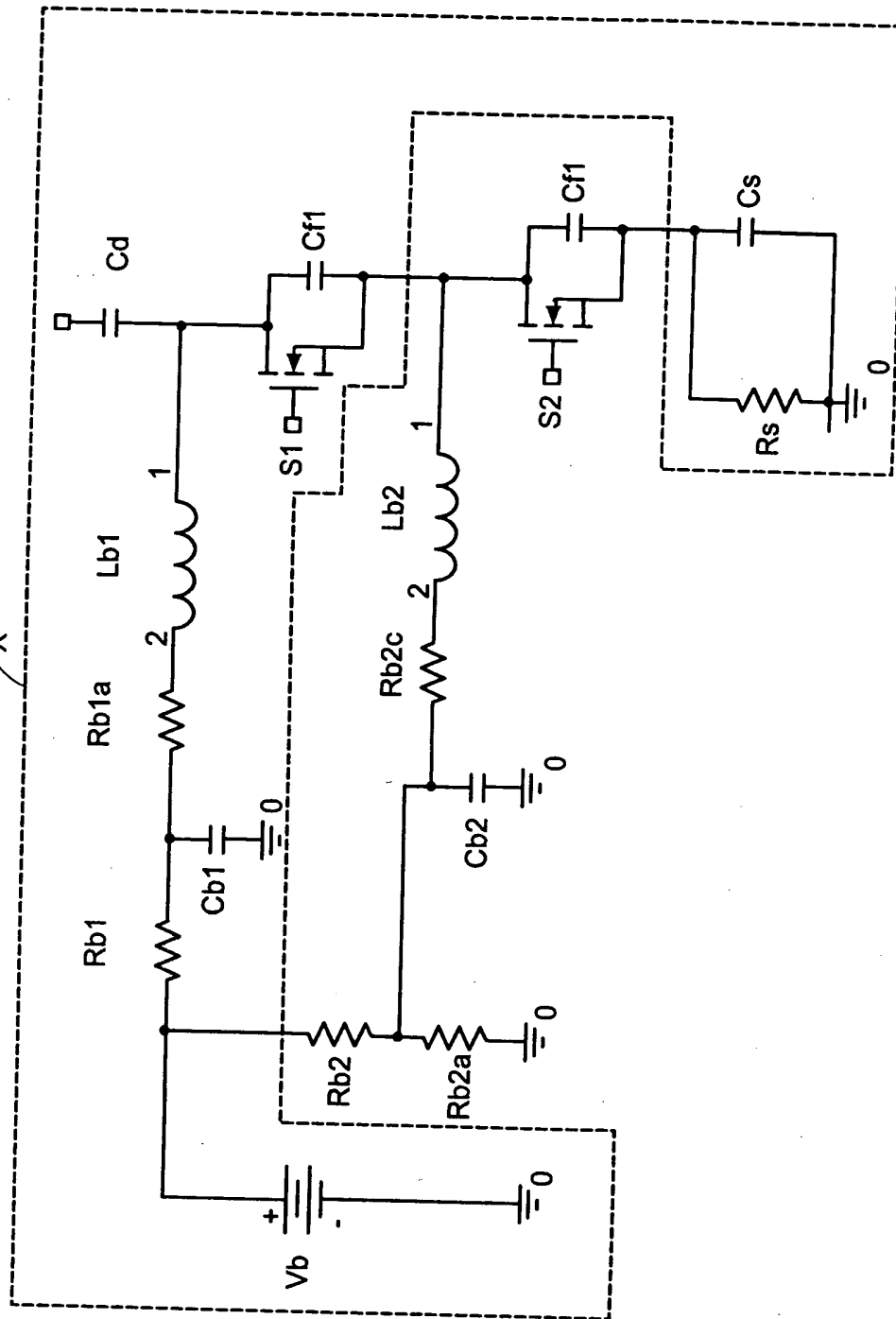


FIG. 18